DCI/IC 74-1097

19 August 1974

MEMORANDUM FOR: AC/IHC
VIA : Admiral Harvey
SUBJECT : Summary of WWMCCS/Intelligence Interface Meeting
1. This is a summary of a meeting held on 15 August between Mr. Ralph Newsome, head of the WWMCCS Intelligence Interface Group and IHC/SS and DCI/IC/CS. The purpose of the meeting was to:
a. deliver the WWMCCS Architecture Planning Studies - Architecture Work Plan (see attachment 6);
b. provide Mr. Newsome proposed briefings for Architecture Management Office (see attachment 1);
c. discuss the specific focus of the Intelligence Interface portion of the WWMCCS Architecture Work Plan;
d. explain the purpose of the WWMCCS Architect (see attachment 5).
2. WWMCCS Intelligence Interface. The overall purpose of the Intelligence Interface Group is to provide a specific focus for the Architect's activities within the intelligence community that are pertinent to tasks identified in the WWMCCS Architecture Work Plan (see attachment 6). The specific purposes are to:
a. provide essential input data to the performance of Subtask 1100; Background Studies, for the four categories to be investigated. Those items are:
(1) military defense policies (both current and feasible in the 1980, 1985, and 1995 time periods);

25X

(2) threat and force structures anticipated;

- (3) the national command level decision processes; and
- (4) the assurance of becoming and remaining fully informed of current WWMCCS-related requirements.

RATIONALE:

The first two items require that the Architect utilize and interpret selected intelligence material to adequately understand and ensure validity of the broad policy alternatives and of the threat projections for the mid- and long-range periods. For definition of the NCA decision processes and a thorough understanding of all WWMCCS-related requirements it is essential, according to Mr. Newsome, that the Architect be familiar with the information inputs to the NCA, which are primarily from intelligence sources; and that all intelligence planning that will impact WWMCCS through the 1995 time period be available to the Intelligence Interface Group for incorporation into the architecture.

Additionally, the thoroughness to which Subtask 1100 above is completed is extremely critical to the successful outcome of the architecture; it is essential, according to Newsome, that inputs from intelligence organizations be comprehensively reviewed for incorporation into the activities of this Subtask.

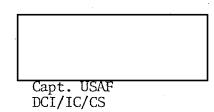
- b. provide background information to the Architect, available through intelligence sources, on prior crisis/conflict situations as an input to Task 1200; Crisis/Conflict Situation Definition for NCA.
- c. provide the Architect with an understanding of techniques and technologies used by the intelligence community to support WWMCCS on the areas of Indications and Warning, ADP and Communications as part of the data bank required in Task 3100; Current and Planned Subsystem Review, and Task 3200; Subsystem and Technology Assessment.
- d. provide a basis for screening information requirements to develop System and Subsystem Functional Definitions (Task 2000), and particularly in the allocation of subsystem functions between the operations and intelligence activities to accomplish overall command and control goals in support of the NCA.
- e. enable the Architecture Development (Task 5000) to properly segregate (from both hardware and software points of view) within alternative architectural approaches those elements which would properly be recommended for incorporation with command and control subsystems, those which would be tasked to the intelligence community, and those that should be accomplished jointly.

- 3. Concept of Operations. The basic approach planned for the accomplishment of this task, by the Intelligence Interface Group (IIG), is the immediate establishment of a small team of individuals who have had extensive and meaningful prior experience in working with the intelligence community. They would do the following; according to Newsome:
- a. On an individual basis personnel of the IIG would be given primary responsibility for liaison between all appropriate intelligence agencies and personnel in other tasks in the Architectural Work Plan. With the assistance of both the ASD(I) and DTACCS as defined in a Memo of Understanding, dated 10 June 1974, these individuals will be given responsibility for liason with the national level organizations with which WWMCCS must interface (such as the CIA, State Department, DIA, NSA, and special organizations) and with CINC and Service intelligence activities.
- b. In their assigned areas these intelligence liaison individuals will become throughly familiar with the functions, technologies and techniques for providing information to command and control activities. This will be accomplished by extensive personnel interviews and reviewing available documents. As a result of their familiarity with the intelligence community these individuals will be able to provide inputs and to review documentation prepared by the various task groups described above.
- 4. Primary Benefits. The benefits that are expected from the accomplishment of the task outlined above include, according to Newsome:
- a. Definition, in specific terms, of the many facets of the WWMCCS/Intelligence Interface.
- b. Screening of requirements, functional definitions and architectural alternatives to eliminate those that have already been tried or planned so that the architectural effort can concentrate on new needs and new approaches to the fulfillment of WWMCCS objectives. This is particularly pertinent in the area of correlation and display of operational and intelligence information.
- c. Identification of techniques and technologies that are common to both the operational and intelligence communities and recommendations for consolidated development for these common needs when it is cost-effective and timely. Included are such areas as the techniques and technology for computer internetting, universal query languages, techniques for multiple sensor usage and data correlation between WWMCCS and intelligence sources (e.g.FORSTAT reporting, tactical warning).

d. A comprehensive understanding by the interface group of the capabilities and limitations of present and planned intelligence resources. If authorized to do so by the WWMCCS Council Support Group, an output of this task will be a handbook for crisis management advisory personnel (e.g., an appendix to "The Senior Officer's Handbook") to provide an understanding of capabilities and limitations of intelligence resources to Senior WWMCCS management personnel.

In addition, specific intelligence related tasks not included above may be initiated by ASD(I), the Support Group or the IBM WWMCCS architect. Such tasks are to be approved by the WWMCCS Council Support Group and the Assistant to DTACCS for WWMCCS Architect Management prior to any IBM resource expenditure exceeding one manmonth.

- 5. Follow-on Action by IHC. Based upon the additional information we have received regarding the special task of the Intelligence Interface Group, recommend that:
- a. the attached material be disseminated to IC staff divisions;
- b. the head of the Intelligence Interface Group brief the IC staff on the WWMCCS project;
- c. the WWMCCS Intelligence Interface Group and ASD/I and IC staff involvement be brought to the attention of the DCI/USIB; and
- d. the ASD(I) liaison officer on WWMCCS, Mr. Wally Henderson be brought up to date on IC/IHC proposed briefing schedule.
- 6. Conclusion. It was suggested by and I, that all reports/studies pertaining to the intelligence community, written by the Intelligence Interface Group be made available to us prior to publication. Mr. Newsome, completely concurs with the suggestion and would welcome a review by IC/IHC of his study as he proceeds.
- 7. This summary includes all-actions to date related to the WWMCCS project taken by IC/IHC. As more information becomes available it will be disseminated to the Ad Hoc WWMCCS Interface Working Group and others as required.



25×

At	tac	-hm	en	ts	•
ru	Lav	-111	\sim 11	u	•

- 1. Proposed Briefings for WWMCCS Architecture Management Office.
- 2. ASD(I) letter of 5 August 1974 to DCI, subject <u>WWMCCS</u> Architect.
- 3. D/DCI/IC letter of 13 August 1974 to ASD(I) subject as IC Point of Contact.

25X

- 4. Lucas Memo of 13 August 1974 to AD/DCI/IC subject Summary of WWMCCS Architects Meeting.
- 5. WWMCCS Architect Briefing.
- 6. WWMCCS Architecture Work Plan.

DCI	/IC/CS/	(19	Aug	74)
Dis	tribution:			
0 -	Addee			
1 -	Admiral Harvey			
1 -				
1 -				
1 -	l '			
1 -				
1 -				
1 -				
1 -	IC Registry			
1 -	CS Subject			

1 - CS Chrono

PROPOSED BRIEFINGS FOR WWMCCS ARCHITECTURE MANAGEMENT OFFICE

- 1. CIA Communications Network
- 2. CIA Operations Center
- CIA Office of Joint Computer Support Operations -(Present - Planned)
- 4. NPIC Activities (Present Planned)
- 5. State Communications Network
- 6. State Operations Center
- 7. State/INR Automation Activities
- 8. National Intelligence Center (Watch Committee)
- 9. Family of National Products NOWION, NOIAN, CONTEXT
- 10. Community Intelligence Security Policies

Note: Will also assist in arranging intelligence briefs by Army and Air Force.

25X



Next 1 Page(s) In Document Exempt

. 3

Approved Her Benese 2004/05/05ENTR-RDH80Nf01082A006700030020-4

WASHINGTON, D.C. 20505

Office of the Deputy for the Intelligence Community

DCI/IC 74-1813

13 AUG 13/4

The Honorable Albert C. Hall Assistant Secretary of Defense(Intelligence) Room 3C200 The Pentagon

Dear Al:

will be the managerial point of contact to work with Wally Henderson in the WWMCCS. Bill asked that I advise you in response to your letter of August 5, 1974. Nate has been in touch with Mr. Luckom and Mr. Newsome, and has a continuing working relationship with Wally Henderson.

Sincerely,

Acting Deputy to the DCI for the Intelligence Community

Distribution:

Original - Addressee

1 - Acting D/DCI/IC

1 - IC Registry

1 - IHC internal

25X



DCI/IC 74-1087

13 August 1974

MEMORAND	UM F	OR:	
VIA		:	
SUBJECT	•	:	Summary of Worldwide Military Command- Control System Architects Meeting

- 1. This memorandum summarizes a discussion of a meeting held on 6 August between representatives of the IC Staff and IBM contractors to the Worldwide Military Command and Control System (WWMCCS) Architecture Management Office. The purpose of the meeting was to:
- a. establish contact with the Intelligence Community Staff;
- b. describe the function of the Architecture Management Office (AMO);
- c. explain the current progress of the military command and control project in DOD;
- d. identify ways in which the IC Staff could assist the AMO;
- e. determine what plans the Intelligence Community has for interfacing with the Military Command and Control System.
- 2. The discussion was held in the IC Staff conference room at the TS/SI/TK level and the following persons attended:

Approved For Release 2004/05/05 : CIA-RDP80M01082A000700030020-4	
2	5X
3. The meeting was divided into three parts:	
a. introduction and overview on the organization of the National Intelligence Community;	
b. background on the Worldwide Military Command and Control System with specific reference to the Architecture Management Office; and	
c. question and answer preiod.	
4. Introduction and overview. Chairman of the USIB Information Handling Committee and host of the meeting, described the functions of the IHC, the IHC/SS, the IC Staff and its divisions and their relationships to the DCI, USIB and IRAC. He noted that the interface with intelligence to command and control include communications, computers, installations, command posts, etc. He mentioned work on crisis management as item of interest.	5X
5. Background of WWMCCS. Mr. Luckom, Chief of the Architecture Management Office and IBM contractor, described the organization of the WWMCCS effort under the SecDef, illustrating the relationship of WWMCCS Council and its Support Group to the Director, Telecommunication and Command and Control Systems (DTACCS). The WWMCCS Architecture Management Office is organized into the Subsystem Analysts Group, the Architecture Planning Group and the Requirements Analysts Group which is headed by V. V. MacRay, and includes the Interface Requirements Analysts effort headed by Mr.	
Luckom himself. His effort is directed toward understanding the Military commands and Defense agencies on the one hand, and Mr. Newsome's effort is focused on Intelligence Requirements	₹
	5) 5)

<u>SEUNET</u>

Approved For Release 2004/05/05: CIA-RDP80M01082A000700030020-4

Control System. Essentially those requirements are stated in terms of the operational elements of the JCS (J-3). He pointed out that "...operators have difficulty in stating requirements when they know little about what intelligence can provide, and it is difficult for intelligence to know what operations really needs." He added that these difficulties are complicated by the growing need for near realtime interfaces and by the compartmentation practiced by both intelligence and operations. (Mr. Luckom will forward within two weeks specific terms of reference and background material on WWMCCS).

- 6. Questions and answers. It is important to keep in mind that WWMCCS is being designed for 1980-85-95, with Mr. Luckum's study effort focused on 1985, since 1980 is too near in the planning, programming and budget sense to do much changing. Based on the 1985 target date, he needs information on the following:
- a. the kind of production support available from the CIA to WWMCCS, either through DIA as J-2 or directly;
- b. overhead imagery systems, specifically their capabilities; for example
- (1) How fast can it get to the intelligence processor at NPIC?
 - (2) Is imagery sent by film, or other means?
- (3) How do results of processing get to the analyst and then to the operational user?
- c. current intelligence community planning in terms of information handling, techniques of analysis, information transfer and communications between the community and WWMCCS.
- 7. Mr. Luckum's study effort is divided into three phases:
- a. by the end of November 1974, he must establish WWMCCS requirements with respect to the nuclear situation (reference to NSDM 242);
 - b. by February 1975, he examines crisis communications;

- c. by May 1975 he must have an overall study complete in a form to brief the WWMCCS Council on broad alternatives, and have the Council respond by narrowing the scope of his future work. Therefore, he would like intelligence briefings completed by the end of September, and will need a first cut survey of the intelligence community by then. He would like to remain in contact with IC Staff on the details of his study up through his May 1975 deadline.
- 8. IC Staff and IHC Involvement. The present concept, subject to approval, is to have a defacto Working Group established consisting of the people present at the 6 August meeting, plus those who could be brought in later as required, i.e., CIA/OC, NPIC, State/INR (Bill Berry), etc. The Chairman of the Working Group would disseminate factual information, memorandum, and reports of what is going on in the WWMCCS Interface Working Group to everyone concerned. In addition, IHC would do the following:
- a. Serve as the mechanism to help make contacts, share information around the intelligence community, etc. Rationale: We do not need to set up a separate data collecting group, because there are enough USIB instrumentalities already, and in this case, IHC. The IC Staff and IHC would be involved only to the extent necessary to monitor briefings the IBM people receive in the community and to learn about the WWMCCS process ourselves.

b. as Acting Chairman of IHC would	
chair the group as a matter of protocal. IHC	
Support Staff would be the action officer and	
ICS/SS would be Executive Secretary and assist	1
with action officer responsibilities.	_

- 9. Recommendations. Request approval to proceed with the plan as outlined above in paragraph 8 including the authorization to arrange the following schedule of briefings for the IBM contractors.
 - a. CIA Communications Network
 - b. CIA Operations Center
 - c. NPIC Activities (Present-Planned)
 - d. State Operations Center/INR
 - e. Community Intelligence Security Policies

25X 25X 25X

- f. Family of National Products --NOWION, NOIAN/Context
- g. National Intelligence Center (Watch Committee)
- h. IHC Service Reps.
- 10. This is a summary of the discussion of 6 August. More detailed information on WWMCCS project will be available and disseminated upon receipt of Mr. Luckom's package.

Acting Executive Secretary for WWMCCS Interface Working Group

25X



CURRENTLY APPROVED INVESTIGATIONS

WWMCCS UTILIZATION OF SATELLITE COMMUNICATIONS

- INTENSIFY FOCUS ON WWMCCS SATCOM RESOURCE REQUIREMENTS
- CONSOLIDATE CONNECTIVITY AND UTILIZATION REQUIREMENTS
- PROVIDE EARLY WWMCCS POSITION ON DCA MILSATCOM

ARCHITECTURE THROUGH J-6

CURRENTLY APPROVED INVESTIGATIONS

ADP SOFTWARE DEVELOPMENT

MANAGEMENT CONTROL IMPROVEMENTS

- PERFORMANCE IMPROVEMENTS

PRODUCTIVITY

RELIABILITY

MAINTAINABILITY

ACTIVITY SUMMARY

CURRENT SYSTEM ASSESSMENT CONTINUES

CAPABILITY BOOKS PROCEEDING

AD HOC PARTICIPATION

WARNING SYSTEM TRADEOFF ASSESSMENT

ADVANCED AIRBORNE CP BLOCK II

DOD INTERNETTING TASK FORCE

NEAR TERM IMPROVEMENTS

SOFTWARE MANAGEMENT

WWMCCS SATELLITE COMMUNICATIONS REQUIREMENTS

MAJOR EMPHASIS - REQUIREMENTS ANALYSIS

REPRESENTATIVE SET OF NUCLEAR SITUATIONS

RESPONSE OPTION MATRICES

KEY QUESTION STRUCTURE

POLICY ALTERNATIVES AFFECTING WWMCCS

WWMCCS ARCHITECT

IBM ARCHITECTURAL ORGANIZATION

- REPORTS DIRECTLY TO IBM FSD PRESIDENT, JOHN B. JACKSON
- WWMCCS ARCHITECT, VINCENT N. COOK
- THREE ORGANIZATIONAL ELEMENTS
 - DEPUTY FOR REQUIREMENTS ANALYSIS, DR. VINCENT V. MCRAE
 - DEPUTY FOR SUBSYSTEM ANALYSIS, TREVOR L. HUTH
 - DEPUTY FOR ARCHITECTURE PLANNING, DR. CHARLES M. JOHNSON

!	FY I	1974 FY 1975										FY 1976											
	М	J	J	Α	S	0	N-	D	J	F	М	Α	М	J.	J	Α	S	0	Ν	D) J	F	M
ACQUISITION DECISION-MAKING METHODOLOGY REVIEW	(200	Mil	eston	ne Cri	isis (r Öutp Outpu Outpu	t	
NCA REQUIREMENTS REVIEW			Ð													*	Ma	nager	ment	Re	ports	-	
WWMCCS REQUIREMENTS AND FUNCTIONS								N N) -	(-	-			
BROAD ARCHITECTURAL ALTERNATES										\ \ \ \ \ \	()-	_		}	-				-		-	-
SELECTED ARCHITECTURAL ALTERNATES											\						(1	-	_			-
ARCHITECTURAL PLAN			\ \ -			*-			*-			*		<u> </u>	*			*-			1		
NEAR TERM IMPROVEMENT RECOMMENDATIONS			<u>, ι</u> ,																				
PLANNING PROGRAMMING BUDGETING CYCLE	:	J S O P V.				D P P G			- FY	P P G M	_		P O M	V.	P) [DGET	D P P G	978		P P G	

ARCHITECTURAL PLAN PREPARATION

Architectural Plan

Part I Architecture

Policy Objectives Requirements Selected Alternatives

Part II System Evolution Plan

Specific Objectives R&D Projection and Plan System Component Changes Configuration Control

Part III
Architecture Evolution Plan

Architecture Change Methodology Procedures

SUPPORTING ACTIVITIES

ADVANCED TECHNOLOGY

Define the Future Technical Environment
 Identify Possible Applications to Architecture

- Data Acquisition
- Data Processing
- o Data Presentation
- e Communications

Provide Guidelines for Scheduling Long Range R&D

WWMCCS ARCHITECTURAL INTERFACE GROUPS

In-Residence Participation in WWMCCS Related Planning

- Services
- Agencies
- o CINCs
- Components

Assure Operational Viewpoint

PROGRAM MANAGEMENT

Administration

Program Control

ARCHITECTURE DEVELOPMENT

Develop Architectural Methodology Assimilate:

- Policy, Threat and Force Structure
- Requirements
- Impact and Exploitation of Technology
- Subsystem Analysis

Translate to Broad Architectural Alternatives
Need/Worth Balance
Select Alternatives With WWMCCS Council
Validate from Operational Viewpoint

SUBSYSTEM ANALYSIS

Analyze and Evaluate Current Subsystems

- Requirements
- Objectives
- Available Technology
- Current Performance
- Potential Performance

Recommend Near Term Improvements

Identify Capabilities Requiring Further R&D

Assist in Architectural Development

SYSTEM AND SUBSYSTEM FUNCTIONAL DEFINITION

Determine Functions Related To

- Providing Information (Upward Flow)
- Executing Directives, Implementing Decisions (Downward Flow)

Structure and Evaluate Functional Framework

- Geographical Reference
- CINC Relationships
- Subsystems and Support Systems

REQUIREMENTS DEFINITION - TOP DOWN

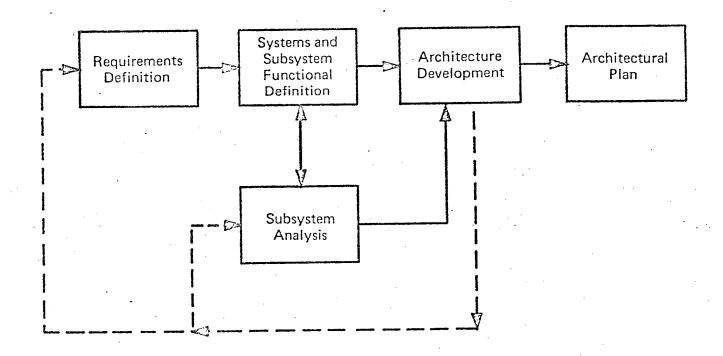
Review CONTEXT of WWMCCS

- Policy
- Threat
- Decision Making
- Force Structure

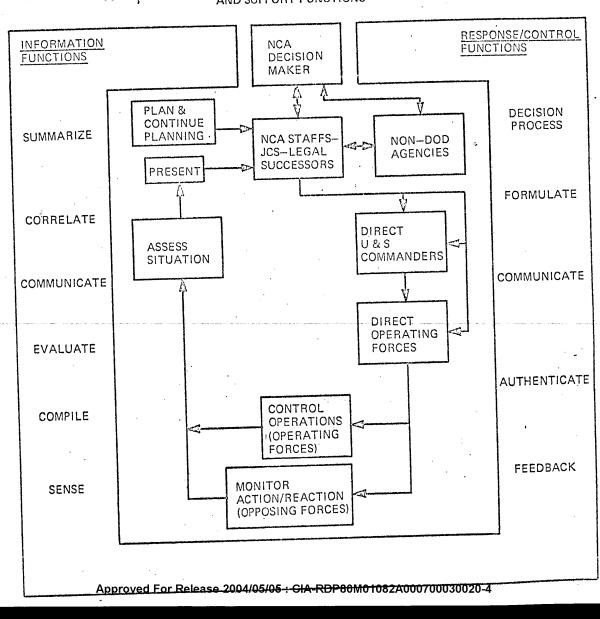
Analyze

- Information Requirements
- Functional Requirements
- Performance Requirements
 - Quantitative
 - Qualitative
- Performance Against Architecture

RELATIONSHIP BETWEEN MAJOR TASKS



Approved For Release AND 405/05: CIA REPROVED 1082A000700030020-4



WWMCCS ARCHITECT

Objective

Develop Architectural Plan for SECDEF That Provides the Means to Guide the Development of a WWMCCS Responsive to Changing NCA Needs

Scope

- DOD Dir. 5100.30
- Top Down Requirements Definition
 - Current Systems Improvement Planning
 - Architectural Plan 1980 85 95

Emphasis

- Attention to Near Term Improvements
- Methodology
- · DOD Planning Cycle Compatibility
- Establish Appropriate Interfaces
- Council Approval of Architectural Alternatives

